

DELAY LINE ANODES

Abstract

In detectors for imaging and other applications, delay line anodes are arrayed so as to allow detection of the location and/or timing of particle hits. The anodes are arrayed to provide an upper anode and one or more lower anodes, with particles incident on the upper anode passing in turn to the lower anodes. The anode arrays allow the use of identically manufactured anodes which are maintained in parallel spaced relation along the travel path of the particles of interest without dielectric material or other structure situated between the anodes. The spacing between the anodes is preferably adjustable so as to allow the installer and/or user to modify the performance characteristics of the array. The anodes may be made of pre-formed metal foil signal and ground layers laminated onto opposing sides of a dielectric sheet, or may be etched or otherwise formed from flex circuit material, so that the anodes and the overall array are light weight, compact, and flexible.